



Volume XXX

# The Real Estate ANALYST

MARCH 31  
1961

© by ROY WENZLICK RESEARCH CORP., 1961

Number 13

*Real Estate Economists, Appraisers and Counselors*

## POPULATION DENSITY

PEOPLE create urban land values. While agricultural land value depends upon the twin factors of distance to markets and fertility of the soil, urban land values depend upon the income that can be earned by a business or building representing the highest and best use in a particular location. This income is generated to a great extent by the number and kind of people living, working, or shopping in this area. Population density is a measure of the number of persons living in a particular area. The table on pages 128 through 132 lists the population density of the 207 metropolitan statistical areas in 1950 and 1960. Since we have used the same areas for each metropolitan area in 1950 and 1960, the percentage change in population density will be the same as the percentage change in population that we have listed in column four in the table.

The Jersey City Metropolitan Statistical Area within the New York Standard Consolidated Area had more people living within its boundary than any other of the areas. There were 13,572 persons per square mile in Jersey City. The least densely populated metropolitan area was Reno, Nevada, with 14 persons per square mile. The average density for all of the metropolitan areas of the United States was 370 persons per square mile. This was about 6 times the average density for the United States as a whole. Our metropolitan areas, however, are not as crowded as countries such as the Netherlands with 838 persons per square mile, the United Kingdom with 547 persons per square mile, and Japan with 629 persons per square mile. Cities in the past have been much more crowded. In ancient Rome in A. D. 74 during the reign of Vespasian, the population of Rome was approximately a million and a half, and at that time the density of the population was 250,000 persons per square mile.

The Census has defined a Standard Metropolitan Statistical Area to include whole counties, except in New England. Here townships are used, since they are a more important political unit. Essentially, a metropolitan statistical area is a county containing a city with 50,000 or more inhabitants. Under certain conditions a county containing two adjacent cities may become a metropolitan area if the sum of the population is 50,000 or greater. Adjacent counties are included in the metropolitan statistical area if enough people living there work in the central city or vice versa. The Census has defined two areas as standard consolidated areas. They are New York-Northeastern New Jersey, and Chicago-Northwestern Indiana. These were formerly standard metropoli-

(cont. on page 133)

**POPULATION DENSITY**  
**STANDARD METROPOLITAN STATISTICAL AREAS**

Standard Metropolitan Statistical Area	Land Area Sq. Mi.	Population Density per Square Mile		% Change in Population 1950-60
		1960	1950	
Abilene, Tex.	1,872	64.3	45.7	+40.8
Akron, Ohio	413	1,243.5	992.8	+25.3
Albany, Ga.	326	232.1	133.8	+73.5
Albany-Schenectady-Troy, N. Y.	2,219	296.3	265.6	+11.6
Albuquerque, N. Mex.	1,163	225.4	125.3	+80.0
Allentown-Bethlehem-Easton, Pa.-N. J.	1,082	454.9	404.6	+12.4
Altoona, Pa.	530	259.0	263.2	-1.6
Amarillo, Tex.	1,812	82.5	48.1	+71.6
Ann Arbor, Mich.	716	240.8	188.0	+28.1
Asheville, N. C.	646	201.4	192.6	+4.6
Atlanta, Ga.	1,726	589.3	421.2	+39.9
Atlantic City, N. J.	575	279.8	230.3	+21.5
Augusta, Ga.-S. C.	1,422	152.3	113.9	+33.7
Austin, Tex.	1,015	209.0	158.6	+31.8
Bakersfield, Calif.	8,170	35.7	27.9	+27.9
Baltimore, Md.	1,813	952.6	775.2	+22.9
Baton Rouge, La.	462	498.0	342.5	+45.4
Bay City, Mich.	446	240.0	198.3	+21.0
Beaumont-Port Arthur, Tex.	1,301	235.2	181.1	+29.9
Billings, Mont.	2,635	30.0	21.2	+41.4
Binghamton-Endicott, N. Y.	710	299.5	260.1	+15.1
Birmingham, Ala.	1,118	567.9	499.9	+13.6
Boston, Mass.	969	2,672.7	2,487.7	+7.4
Bridgeport, Conn.	164	2,040.1	1,669.0	+22.2
Brockton, Mass.	163	916.9	734.5	+24.8
Brownsville-Harlingen-San Benito, Tex.	883	171.1	141.8	+20.7
Buffalo, N. Y.	1,587	823.5	686.3	+20.0
Canton, Ohio	573	594.0	494.2	+20.2
Cedar Rapids, Iowa	713	192.0	146.2	+31.3
Champaign-Urbana, Ill.	1,000	132.4	106.1	+24.8
Charleston, S. C.	945	229.0	174.4	+31.3
Charleston, W. Va.	908	278.6	263.9	+5.5
Charlotte, N. C.	542	502.0	363.6	+38.1
Chattanooga, Tenn.-Ga.	1,024	276.5	240.7	+14.9
Chicago-Northwestern Indiana Standard Consolidated Area	4,653	1,460.2	1,200.5	+21.6
Chicago, Ill., SMSA	3,714	1,675.0	1,394.1	+20.1
Gary-Hammond-East Chicago, Ind., SMSA	939	610.8	434.7	+40.5
Cincinnati, Ohio-Ky.	730	1,468.0	1,238.9	+18.5
Cleveland, Ohio	688	2,611.3	2,130.1	+22.6
Colorado Springs, Colo.	2,158	66.6	34.5	+92.9
Columbia, S. C.	1,464	178.2	127.6	+39.6
Columbus, Ga.-Ala.	1,112	196.0	153.4	+27.8

**POPULATION DENSITY**  
**STANDARD METROPOLITAN STATISTICAL AREAS**

Standard Metropolitan Statistical Area	Land Area Sq. Mi.	Population Density per Square Mile 1960	Population Density per Square Mile 1950	% Change in Population 1950-60
Columbus, Ohio . . . . .	538	1,269.4	935.7	+35.7
Corpus Christi, Tex. . . . .	838	264.4	197.5	+34.0
Dallas, Tex. . . . .	3,674	294.9	202.4	+45.7
Davenport-Rock Island-Moline, Iowa-Ill. . . . .	873	309.3	268.3	+15.3
Dayton, Ohio . . . . .	1,288	539.3	402.7	+33.9
Decatur, Ill. . . . .	577	205.0	171.3	+19.6
Denver, Colo. . . . .	3,671	253.2	166.7	+51.8
Des Moines, Iowa . . . . .	594	448.3	380.5	+17.8
Detroit, Mich. . . . .	1,965	1,914.7	1,535.0	+24.7
Dubuque, Iowa . . . . .	608	131.7	117.3	+12.2
Duluth-Superior, Minn.-Wis. . . . .	7,591	36.4	33.3	+9.4
Durham, N. C. . . . .	299	374.6	339.9	+10.2
El Paso, Tex. . . . .	1,054	298.0	185.0	+61.1
Erie, Pa. . . . .	812	308.7	270.2	+14.3
Eugene, Oreg. . . . .	4,594	35.5	27.4	+29.5
Evansville, Ind.-Ky. . . . .	681	292.7	280.7	+4.3
Fall River, Mass.-R. I. . . . .	144	959.4	953.5	+0.6
Fargo-Moorhead, N. Dak.-Minn. . . . .	2,799	37.9	31.9	+18.8
Fitchburg-Leominster, Mass. . . . .	99	833.2	757.0	+10.1
Flint, Mich. . . . .	644	581.2	420.8	+38.1
Fort Lauderdale-Hollywood, Fla. . . . .	1,218	274.2	68.9	+297.9
Fort Smith, Ark. . . . .	529	126.1	121.4	+3.9
Fort Wayne, Ind. . . . .	671	346.0	273.8	+26.4
Fort Worth, Tex. . . . .	1,617	354.5	242.8	+46.0
Fresno, Calif. . . . .	5,985	61.1	46.2	+32.3
Gadsden, Ala. . . . .	555	174.7	169.2	+3.3
Galveston-Texas City, Tex. . . . .	430	326.4	262.9	+24.1
Grand Rapids, Mich. . . . .	862	421.3	334.4	+26.0
Great Falls, Mont. . . . .	2,658	27.6	19.9	+38.5
Green Bay, Wis. . . . .	525	238.2	187.3	+27.2
Greensboro-High Point, N. C. . . . .	651	378.7	293.5	+29.0
Greenville, S. C. . . . .	789	265.9	213.1	+24.8
Hamilton-Middletown, Ohio . . . . .	471	422.7	312.5	+35.2
Harrisburg, Pa. . . . .	1,075	321.0	271.9	+18.1
Hartford, Conn. . . . .	511	1,027.7	795.6	+29.2
Honolulu, Hawaii . . . . .	590	848.2	598.3	+41.8
Houston, Tex. . . . .	1,734	716.9	465.2	+54.1
Huntington-Ashland, W. Va.-Ky.-Ohio . . . . .	1,407	181.1	174.7	+3.7
Huntsville, Ala. . . . .	803	146.1	90.8	+61.0
Indianapolis, Ind. . . . .	402	1,735.2	1,372.6	+26.4
Jackson, Mich. . . . .	705	187.2	153.1	+22.3
Jackson, Miss. . . . .	877	213.3	162.1	+31.6
Jacksonville, Fla. . . . .	770	591.4	394.8	+49.8

**POPULATION DENSITY**  
**STANDARD METROPOLITAN STATISTICAL AREAS**

Standard Metropolitan Statistical Area	Land Area Sq. Mi.	Population Density per Square Mile		% Change in Population 1950-60
		1960	1950	
Johnstown, Pa.	1,779	157.8	163.8	-3.6
Kalamazoo, Mich.	567	299.3	223.5	+33.9
Kansas City, Mo.-Kans.	1,643	632.7	495.7	+27.6
Kenosha, Wis.	273	368.6	375.6	+33.7
Knoxville, Tenn.	1,428	257.8	236.1	+9.2
Lake Charles, La.	1,104	131.8	81.2	+62.3
Lancaster, Pa.	945	294.6	248.4	+18.6
Lansing, Mich.	1,697	176.2	143.9	+22.4
Laredo, Tex.	3,295	19.7	17.0	+15.4
Las Vegas, Nev.	7,927	16.0	6.1	+163.0
Lawrence-Haverhill, Mass.-N. H.	163	1,150.9	1,119.3	+2.8
Lawton, Okla.	1,088	83.5	50.7	+64.6
Lewiston-Auburn, Maine	120	585.8	570.2	+2.7
Lexington, Ky.	280	471.1	359.8	+30.9
Lima, Ohio	410	252.9	215.1	+17.6
Lincoln, Nebr.	845	183.8	141.7	+29.7
Little Rock-North Little Rock, Ark.	781	311.1	251.8	+23.5
Lorain-Elyria, Ohio	495	439.4	299.3	+46.8
Los Angeles-Long Beach, Calif.	4,853	1,389.4	900.0	+54.4
Louisville, Ky.-Ind.	908	798.6	635.4	+25.7
Lowell, Mass.	123	1,284.4	1,105.6	+16.2
Lubbock, Tex.	892	175.2	113.3	+54.7
Lynchburg, Va.	1,010	109.6	96.0	+14.2
Macon, Ga.	630	286.4	214.4	+33.6
Madison, Wis.	1,197	185.5	141.5	+31.1
Manchester, N. H.	70	1,364.5	1,262.4	+8.1
Memphis, Tenn.	751	834.9	642.3	+30.0
Meriden, Conn.	23	2,254.3	1,916.9	+17.6
Miami, Fla.	2,054	455.2	241.0	+88.9
Midland, Tex.	938	72.2	27.5	+162.6
Milwaukee, Wis.	795	1,502.3	1,203.7	+24.8
Minneapolis-St. Paul, Minn.	2,111	702.0	545.3	+28.8
Mobile, Ala.	1,248	251.8	185.2	+36.0
Monroe, La.	642	158.4	116.4	+36.1
Montgomery, Ala.	790	214.2	175.9	+21.8
Muncie, Ind.	400	277.3	225.6	+22.9
Muskegon-Muskegon Heights, Mich.	504	297.5	241.2	+23.4
Nashville, Tenn.	533	750.0	603.7	+24.2
New Bedford, Mass.	142	1,008.3	999.9	+0.8
New Britain, Conn.	86	1,504.6	1,212.2	+24.1
New Haven, Conn.	199	1,566.2	1,355.3	+15.6
New Orleans, La.	1,118	776.8	613.1	+26.7
Newport News-Hampton, Va.	128	1,753.9	1,210.8	+44.9

**POPULATION DENSITY**  
**STANDARD METROPOLITAN STATISTICAL AREAS**

Standard Metropolitan Statistical Area	Land Area Sq. Mi.	Population Density per Square Mile		% Change in Population 1950-60
		1960	1950	
New York-Northeastern New Jersey				
Standard Consolidated Area . . . . .	3,939	3,747.0	3,278.0	+14.3
New York, N. Y., SMSA . . . . .	2,149	4,976.6	4,446.7	+11.9
Newark, N. J., SMSA . . . . .	699	2,416.9	2,100.8	+15.0
Jersey City, N. J., SMSA . . . . .	45	13,571.9	14,387.5	-5.7
Paterson-Clifton-Passaic, N. J., SMSA	427	2,779.6	2,052.1	+35.5
Middlesex County, N. J. . . . .	312	1,390.6	848.9	+63.8
Somerset County, N. J. . . . .	307	468.8	322.6	+45.3
Norfolk-Portsmouth, Va. . . . .	669	864.7	667.0	+29.7
Norwalk, Conn. . . . .	72	1,343.8	912.3	+47.3
Odessa, Tex. . . . .	907	100.3	46.4	+116.1
Ogden, Utah . . . . .	549	201.8	151.8	+33.0
Oklahoma City, Okla. . . . .	2,141	239.1	183.3	+30.4
Omaha, Nebr.-Iowa . . . . .	1,533	298.7	239.0	+25.0
Orlando, Fla. . . . .	1,237	257.5	114.7	+124.6
Pensacola, Fla. . . . .	1,687	120.6	77.8	+54.9
Peoria, Ill. . . . .	1,277	226.2	196.2	+15.3
Philadelphia, Pa.-N. J. . . . .	3,550	1,223.4	1,034.1	+18.3
Phoenix, Ariz. . . . .	9,226	71.9	36.0	+100.0
Pittsburgh, Pa. . . . .	3,053	787.9	724.9	+8.7
Pittsfield, Mass. . . . .	111	665.2	599.7	+10.9
Portland, Maine . . . . .	95	1,270.0	1,262.5	+0.6
Portland, Oreg.-Wash. . . . .	3,663	224.4	192.4	+16.6
Providence-Pawtucket, R. I.-Mass. . . . .	634	1,287.3	1,199.1	+7.4
Provo-Orem, Utah . . . . .	1,998	53.5	41.0	+30.6
Pueblo, Colo. . . . .	2,401	49.4	37.6	+31.6
Racine, Wis. . . . .	337	420.7	325.2	+29.4
Raleigh, N. C. . . . .	866	195.2	157.6	+23.9
Reading, Pa. . . . .	864	318.8	296.0	+7.7
Reno, Nev. . . . .	6,281	13.5	8.0	+68.8
Richmond, Va. . . . .	734	556.5	446.9	+24.5
Roanoke, Va. . . . .	303	524.1	440.3	+19.0
Rochester, N. Y. . . . .	673	871.3	724.6	+20.3
Rockford, Ill. . . . .	520	403.4	293.0	+37.7
Sacramento, Calif. . . . .	985	510.4	281.4	+81.4
Saginaw, Mich. . . . .	812	234.9	189.1	+24.3
St. Joseph, Mo. . . . .	411	220.4	235.6	-6.4
St. Louis, Mo.-Ill. . . . .	3,187	646.4	539.5	+19.8
Salt Lake City, Utah . . . . .	764	501.4	359.8	+39.3
San Angelo, Tex. . . . .	1,543	41.9	38.2	+9.7
San Antonio, Tex. . . . .	1,247	551.0	401.3	+37.3
San Bernardino-Riverside-Ontario, Calif. . . . .	27,310	29.6	16.5	+79.3
San Diego, Calif. . . . .	4,258	242.6	130.8	+85.5
San Francisco-Oakland, Calif. . . . .	3,314	839.9	676.2	+24.2

**POPULATION DENSITY**  
**STANDARD METROPOLITAN STATISTICAL AREAS**

Standard Metropolitan Statistical Area	Land Area Sq. Mi.	Population Density per Square Mile 1960	1950	% Change in Population 1950-60
San Jose, Calif.	1,305	492.2	222.6	+121.1
Santa Barbara, Calif.	2,745	61.6	35.8	+72.0
Savannah, Ga.	441	427.0	343.5	+24.3
Scranton, Pa.	454	516.6	567.0	-8.9
Seattle, Wash.	4,236	261.4	199.4	+31.1
Shreveport, La.	891	315.9	243.2	+29.9
Sioux City, Iowa	871	123.8	119.3	+3.8
Sioux Falls, S. Dak.	815	106.2	87.0	+22.1
South Bend, Ind.	467	511.0	439.1	+16.4
Spokane, Wash.	1,763	157.9	125.7	+25.7
Springfield, Ill.	880	166.5	149.4	+11.5
Springfield, Mo.	677	186.5	154.8	+20.5
Springfield, Ohio	402	327.0	277.8	+17.7
Springfield-Chicopee-Holyoke, Mass.	429	1,115.6	963.9	+15.7
Stamford, Conn.	89	2,004.6	1,515.7	+32.3
Steubenville-Weirton, Ohio-W. Va.	582	288.2	271.1	+6.3
Stockton, Calif.	1,410	177.3	142.4	+24.5
Syracuse, N. Y.	2,421	232.9	192.1	+21.1
Tacoma, Wash.	1,676	191.9	164.6	+16.6
Tampa-St. Petersburg, Fla.	1,304	592.4	313.8	+88.8
Terre Haute, Ind.	415	261.3	253.4	+3.1
Texarkana, Tex.-Ark.	1,548	59.2	61.1	-3.1
Toledo, Ohio	343	1,332.2	1,153.2	+15.5
Topeka, Kans.	545	259.2	193.4	+34.0
Trenton, N. J.	228	1,168.4	1,007.8	+15.9
Tucson, Ariz.	9,241	28.7	15.3	+88.1
Tulsa, Okla.	572	732.5	573.3	+27.8
Tuscaloosa, Ala.	1,340	81.4	70.2	+15.9
Tyler, Tex.	939	92.0	79.6	+15.6
Utica-Rome, N. Y.	2,669	123.9	106.5	+16.4
Waco, Tex.	1,035	145.0	125.8	+15.3
Washington, D. C.-Md.-Va.	1,488	1,345.4	983.9	+36.7
Waterbury, Conn.	182	998.0	849.8	+17.4
Waterloo, Iowa	567	216.0	177.2	+21.9
West Palm Beach, Fla.	1,978	115.3	58.0	+98.9
Wheeling, W. Va.-Ohio	952	199.9	206.2	-3.0
Wichita, Kans.	999	343.6	222.5	+54.4
Wichita Falls, Tex.	1,529	84.8	68.9	+23.1
Wilkes-Barre-Hazleton, Pa.	891	389.4	440.2	-11.5
Wilmington, Del.-N. J.	787	465.3	341.0	+36.4
Winston-Salem, N. C.	424	446.8	344.7	+29.6
Worcester, Mass.	428	755.4	708.0	+6.7
York, Pa.	914	260.8	221.8	+17.6
Youngstown-Warren, Ohio	1,049	485.2	397.1	+22.2
TOTAL, 207 areas	306,588	369.6	292.1	+26.5

(cont. from page 127)

tan areas, but for technical reasons have now become several metropolitan statistical areas, each making up a standard consolidated area. We feel that these larger areas are more representative of the population of the metropolitan complex, although we have also listed the densities for the smaller areas.

These statistical areas range in size from 23 square miles in Meriden, Connecticut, to 27,310 square miles in San Bernardino-Riverside-Ontario, California. The average was 1,481 square miles. Although it is easier to gather statistics by political subdivisions, one is skeptical about the definition of a metropolitan area that includes such a large area as San Bernardino and that has a population concentrated in only one part of the county. On the other hand, it would be just as inaccurate to use the city limits as the metropolitan area definition, because many satellite cities make up a large continuous metropolitan or urban community. There are also unincorporated areas adjacent to cities which should be included as part of the total urban community.

This way of defining the metropolitan areas may have distorted the information on population density. If the density in a metropolitan area is less than that of the whole United States, as it is in 14 areas, something may be wrong. For example, there are 14 persons per square mile in the metropolitan area of Reno, Nevada. Reno, however, is in Washoe County, which is an area of 6,281 square miles. This is 6 percent of the total land area of Nevada (109,789 square miles). Therefore, the density of 14 persons per square mile is probably unrepresentative of that urban area. Another example is San Bernardino, with 30 persons per square mile in an area almost one-sixth the size of the whole State of California. The closer the actual urbanized area is to the county areas, the closer the density measure will be to the right figure.

Obviously, the population is not uniformly distributed throughout any metropolitan area. The fringes may have a denser population than the downtown area because there is a difference between daytime and nighttime population. For commercial property the daytime population is most important, and may create very high property values although no one lives in the area.

An example of the differences of density within a metropolitan area is New York. The population density of the boroughs of New York is as follows:

**PERSONS PER SQUARE MILE**

	<u>1940</u>	<u>1950</u>	<u>1960</u>
Manhattan	85,888	87,872	76,160
Brooklyn	38,016	36,032	34,560
Bronx	34,048	33,408	32,832
Queens	12,032	13,696	16,000
Richmond	3,072	3,200	3,712
New York City	24,896	25,024	24,704

Shifts in population density will be reflected in shifts in the average land values in different areas. Reductions in population density within an area will foreshadow declines in the average real property values unless it is raised to a higher use.

The following metropolitan areas show declines in population density:

<u>Metropolitan Area</u>	<u>% Decline</u>
Altoona, Pa. ....	2
Johnstown, Pa. ....	4
Jersey City, N. J. ....	6
St. Joseph, Mo. ....	6
Scranton, Pa. ....	9
Texarkana, Tex.-Ark. ....	3
Wheeling, W. Va.-Ohio ....	3
Wilkes-Barre-Hazleton, Pa. ....	12

With the exception of St. Joseph, these areas are all areas of substantial labor surplus according to the Department of Labor. Over 6 percent of the labor force is unemployed, and in most cases over 12 percent is unemployed. The Pennsylvania areas are all centers of coal mining and are thus losing population because of the decline in importance of coal as fuel in the United States. Jersey City is probably showing a decline because of decentralization. This shows that it's essentially a central city and we are correct in including it in the total New York complex. Many central cities throughout the United States have shown declines in population. The decline in population in St. Joseph is entirely in the county area outside of the city. This is essentially an agricultural area which showed a 40 percent decline in population -- a result of the migration from farm to city. In general, the long-term outlook for these areas is not good.

The enclosed map shows population change from 1950 to 1960 for all counties in the United States. Each county within a metropolitan area is shown individually rather than with the area total. This map has purposely been made large for putting on your wall or under the glass on your desk. Its size gives us a chance to pinpoint those areas having the greatest population change. The national increase in population from 1950 to 1960 was 19 percent. This puts 623 counties above the average and 2,492 below the average growth of the nation. Those areas growing, but at less than the average, were really losing their proportionate share of the total population.



13



Volume XXX

# The Real Estate ANALYST

© by ROY WENZLICK RESEARCH CORP., 1961

*Real Estate Economists, Appraisers and Counselors*

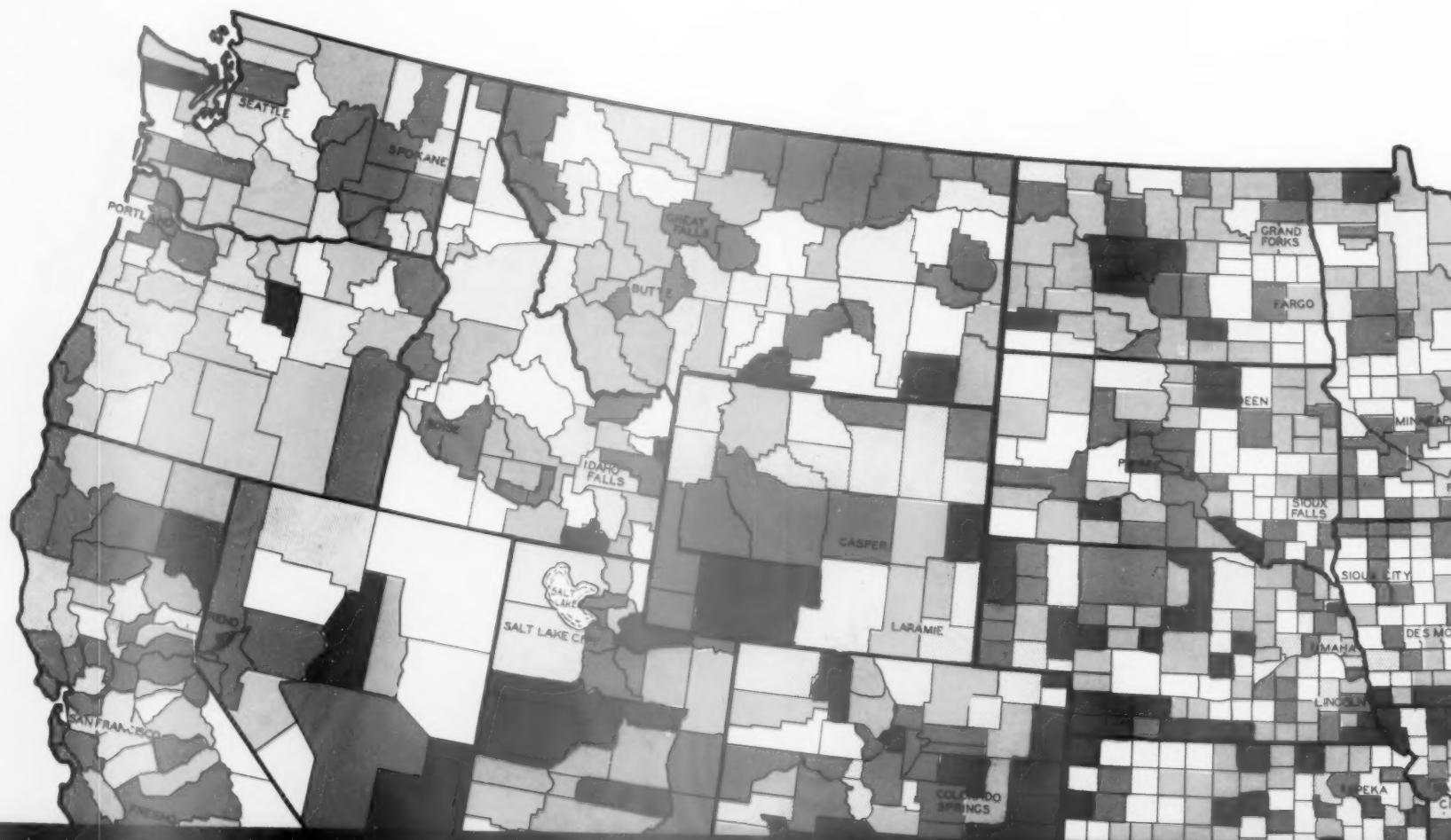
MARCH 31  
1961

Number 13

This folder contains a map of the United States, by counties, showing Percentage Change in Population Growth, 1950 to 1960.

# PERCENTAGE CHANGE IN POPULATION

© by ROY WENZLICK RESEARCH CORP., 1961



# POPULATION BY COUNTIES 1950 TO 1960

